

Motivational Interviewing / Motivational Enhancement Therapy for Cannabis Abuse

Program description:

Motivational Interviewing is a client-centered approach to counseling that helps clients overcome their ambivalence or lack of resolve for behavioral change. In a collaborative and supportive setting, counselors elicit motivation to change from the client rather than through direction or persuasion. Motivational enhancement therapy incorporates structured assessments and follow-up sessions for personal feedback regarding assessment findings.

Typical age of primary program participant: 30

Typical age of secondary program participant: N/A

Meta-Analysis of Program Effects

Outcomes Measured	Primary or Secondary Participant	No. of Effect Sizes	Unadjusted Effect Sizes (Random Effects Model)			Adjusted Effect Sizes and Standard Errors Used in the Benefit-Cost Analysis					
						First time ES is estimated			Second time ES is estimated		
			ES	SE	p-value	ES	SE	Age	ES	SE	Age
Cannabis abuse or dependence	P	17	-0.26	0.09	0.00	-0.20	0.09	30	-0.20	0.09	40

Effect size adapted from Lundahl et al., 2010.

Benefit-Cost Summary

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2011). The economic discount rates and other relevant parameters are described in Technical Appendix 2.	Program Benefits					Costs	Summary Statistics			
	Partici- pants	Tax-payers	Other	Indirect	Total Benefits		Benefit to Cost Ratio	Return on Invest- ment	Benefits Minus Costs	Probability of a positive net present value
	\$1,346	\$691	\$0	\$352	\$2,388	-\$206	\$11.58	154%	\$2,182	100%

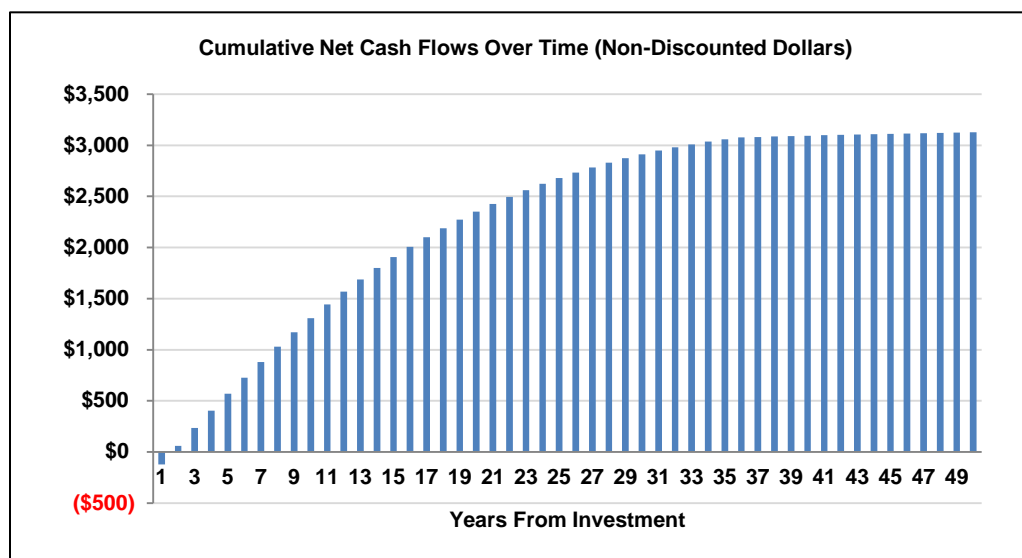
Detailed Monetary Benefit Estimates

Source of Benefits	Benefits to:				
	Parti-cipants	Tax-payers	Other	In-direct	Total Benefits
Earnings via cannabis disorder	\$1,346	\$495	\$0	\$252	\$2,093
Health care costs for cannabis disorder	\$0	\$195	\$0	\$100	\$295

Detailed Cost Estimates

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The uncertainty range is used in Monte Carlo risk analysis, described in Technical Appendix 2.	Program Costs			Comparison Costs			Summary Statistics	
	Annual Cost	Program Duration	Year Dollars	Annual Cost	Program Duration	Year Dollars	Present Value of Net Program Costs (in 2011 dollars)	Uncertainty (+ or - %)
	\$155	1	1997	\$0	1	1997	\$206	0%

Source: Costs are based on an average of 110 minutes of counseling by a trained therapist per intervention. The length of the motivational intervening intervention is the average number of minutes reported in the meta-analyzed studies. The hourly rate was reported in Office of Applied Studies. (2004, June). Alcohol and drug services study (ADSS) cost study. Rockville, MD: Department of Health & Human Services, Substance Abuse and Mental Health Services Administration, Author, p. 23. Another 12 percent was added to costs for administration.



Multiplicative Adjustments Applied to the Meta-Analysis

Type of Adjustment	Multiplier
1- Less well-implemented comparison group or observational study, with some covariates.	0.5
2- Well-implemented comparison group design, often with many statistical controls.	0.5
3- Well-done observational study with many statistical controls (e.g., IV, regression discontinuity).	0.75
4- Random assignment, with some RA implementation issues.	0.75
5- Well-done random assignment study.	1.00
Program developer = researcher	0.5
Unusual (not "real world") setting	0.5
Weak measurement used	0.5

Studies Used in the Meta-Analysis

- Golin, C. E., Earp, J., Tien, H. C., Stewart, P., Porter, C., & Howie, L. (2006). A 2-arm, randomized, controlled trial of a motivational interviewing-based intervention to improve adherence to antiretroviral therapy (ART) among patients failing or initiating ART. *Journal of Acquired Immune Deficiency Syndromes*, 42(1), 42-51.
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- Lundahl, B. W., Kunz, C., Brownell, C., Tollefson, D., & Burke, B. L. (2010). A meta-analysis of motivational interviewing: Twenty-five years of empirical studies. *Research on Social Work Practice*, 20(2), 137-160.
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- McCambridge, J., & Strang, J. (2004). The efficacy of single-session motivational interviewing in reducing drug consumption and perceptions of drug-related risk and harm among young people: Results from a multi-site cluster randomized trial. *Addiction*, 99(1), 39-52.
- McCambridge, J., & Strang, J. (2005). Deterioration over time in effect of motivational interviewing in reducing drug consumption and related risk among young people. *Addiction*, 100(4), 470-478.
- Naar-King, S., Wright, K., Parsons, J. T., Frey, M., Templin, T., Lam, P., & Murphy, D. (2006). Healthy choices: Motivational enhancement therapy for health risk behaviors in HIV-positive youth. *Aids Education and Prevention*, 18(1), 1-11.
- Peterson, P. L., Baer, J. S., Wells, E. A., Ginzler, J. A., & Garrett, S. B. (2006). Short-term effects of a brief motivational intervention to reduce alcohol and drug risk among homeless adolescents. *Psychology of Addictive Behaviors*, 20(3), 254-264.
- Stein, L. A. R., Colby, S. M., Barnett, N. P., Monti, P. M., Golembeske, C., & Lebeau-Craven, R. (2006). Effects of motivational interviewing for incarcerated adolescents on driving under the influence after release. *American Journal on Addictions*, 15(1), 50-57.
- Stephens, R. S., Roffman, R. A., & Curtin, L. (2000). Comparison of extended versus brief treatments for marijuana use. *Journal of Consulting and Clinical Psychology*, 68(5), 898-908.
- Stephens, R. S., Roffman, R. A., Fearer, S. A., Williams, C., Picciano, J. F., & Burke, R. S. (2004). The Marijuana Check-up: Reaching users who are ambivalent about change. *Addiction*, 99(10), 1323-1332.